

Abstract

Bistable micromechanical switch, method for actuating and corresponding method for realizing same

A deformable suspension bridge is attached to a substrate by two legs arranged in such a manner as to transversally subdivide the bridge into a medial segment arranged between the legs and into two outwardly projecting peripheral segments. Peripheral actuators and medial actuators enable the peripheral segments and the medial segment to be respectively and independently deformed perpendicularly to the substrate. As a result, an electrical contact between a first conductive element formed on the substrate, while being situated between the bridge and substrate, and a second conductive element, which is integrally secured to the underside of the bridge, can be made or broken, the switch whereby taking two mechanically stable positions.